

FERMILAB CONSTRUCTION SUBCONTRACT

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1. SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK

1.1 The Subcontractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Subcontractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory

work done by Fermilab as well as from the drawings and specifications made a part of this subcontract. Any failure by the Subcontractor to take the actions described and acknowledged in this paragraph will not relieve the Subcontractor from responsibility for estimating properly the difficulty and cost of successfully performing the work or for proceeding to successfully perform the work without additional expense to Fermilab.

1.2 Fermilab assumes no responsibility for any conclusions or interpretations made by the Subcontractor based on the information made available by Fermilab. Nor does Fermilab assume responsibility for any understanding reached or representation made concerning conditions which can affect the work by any of its officers or agents before the execution of this subcontract, unless that understanding or representation is expressly stated in this subcontract.

2. PAYMENTS UNDER FIXED-PRICED CONSTRUCTION SUBCONTRACTS

2.1 Fermilab shall pay the Subcontractor the subcontract price as provided in this subcontract.

2.2 Fermilab shall make progress payments monthly as the work proceeds, or at more frequent intervals as determined by Fermilab on estimates of work accomplished which meets the standards of quality established under the subcontract, as approved by Fermilab. The Subcontractor shall furnish a breakdown of the total subcontract price showing the amount included therein for each principal category of the work, which shall substantiate the payment amount requested to provide a basis for determining progress payments, in such detail as requested by Fermilab. In the preparation of estimates Fermilab may authorize material delivered on the site and preparatory work done to be taken into consideration. Material delivered to the Subcontractor at locations other than the site may also be taken into consideration if:

- (a) Consideration is specifically authorized by this subcontract, and
- (b) The Subcontractor furnishes satisfactory evidence that it has acquired title to such material and that the material will be used to perform this subcontract.

2.3 Along with each request for progress payments, the Subcontractor shall furnish the following certification, or payment shall not be made:

I hereby certify, to the best of my knowledge and belief, that —

- (1) The amounts requested are only for performance in accordance with the specifications, terms, and conditions of the contract;
- (2) Payments to sub-subcontractors and suppliers have been made from previous payments received under the subcontract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with sub-subcontract agreements and the requirements of chapter 39 of Title 31, United States Code; and
- (3) This request for progress payments does not include any amounts which the Subcontractor intends to withhold or retain from a sub-subcontractor or supplier in accordance with the terms and conditions of the sub-subcontract.

(Name)

(Title)

(Date)

2.4 If the Subcontractor, after making a certified request for progress payments, discovers that a portion or all of such request constitutes a payment for performance by the Subcontractor that fails to conform to the specifications, terms, and conditions of this subcontract (hereinafter referred to as the "unearned amount"), the Subcontractor shall —

- (1) Notify Fermilab of such performance deficiency; and
- (2) Be obligated to pay Fermilab an amount (computed by Fermilab in the manner provided in 31 U.S.C. 3903(c)(1)) equal to interest on the unearned amount from the date of receipt of the unearned amount until —
 - (i) The date the Subcontractor notifies Fermilab that the performance deficiency has been corrected; or
 - (ii) The date the Subcontractor reduces the amount of any subsequent certified request for progress payments by an amount equal to the unearned amount.

2.5 In making such progress payments, there shall be retained 10 percent of the estimated amount until final completion and acceptance of the subcontract work. However, if Fermilab finds that satisfactory progress is being achieved, it may authorize the making of payments in which a lesser percentage is retained. When the work is substantially complete, Fermilab shall retain an amount it considers adequate for the protection of the Government, and may release to the Subcontractor all or any portion of any excess amount. Also, on completion and acceptance of each separate building, public work, or other division of the subcontract, on which the price is stated separately in the subcontract, payment may be made therefor without retention of a percentage.

2.6 All material and work covered by progress payments made shall at the time of payment become the sole property of the Government, but this provision shall not be construed as (a) relieving the Subcontractor from the sole responsibility for all material and work upon which payments have been made or the restoration of any damaged work; or (b) waiving the right of Fermilab to require the fulfillment of all terms of the subcontract.

2.7 In making these progress payments, Fermilab shall, upon request, reimburse the Subcontractor for the amount of premiums paid for performance and payment bonds (including coinsurance and reinsurance agreements, when applicable) after the Subcontractor has furnished evidence of full payment to the surety. The retainage provisions in paragraph 2.5 above shall not apply to that portion of progress payments attributable to bond premiums.

2.8 Fermilab shall pay the amount due the Subcontractor under this subcontract after (a) completion and acceptance of all work; (b) presentation of a properly executed voucher; and (c) presentation of a release of all claims against Fermilab arising by virtue of this subcontract, other than claims in stated amounts that the Subcontractor has specifically excepted from the operation of the release. A release may also be required of the assignee if the Subcontractor's claim to amounts payable under this subcontract has been assigned under the Assignment of Claims Act of 1940 (31 U.S.C. 3727 and 41 U.S.C. 15).

2.9 Notwithstanding any provision of this subcontract, progress payments shall not exceed 80 percent on work accomplished on undefinitized subcontract actions. A "subcontract action" is any action resulting in a subcontract, as defined in FAR Subpart 2.1, including subcontract modifications for additional supplies or services, but not including subcontract modifications that are within the scope and under the terms of the subcontract, such as subcontract modifications issued pursuant to the Changes clause, or funding and other administrative changes.

3. CHANGES

3.1 Fermilab may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make any change in the work within the general scope of the

subcontract, including changes:

- (a) in the specifications (including drawings and designs);
- (b) in the method or manner of performance of the work;
- (c) in the Fermilab furnished facilities, equipment, materials, services, or site; or
- (d) directing acceleration in the performance of the work.

3.2 Any other written order or oral order (which, as used in this paragraph 3.2 includes direction, instruction, interpretation, or determination) from Fermilab that causes change shall be treated as a change order under this clause, provided that the Subcontractor gives Fermilab written notice stating (a) the date, circumstances, and source of the order and (b) that the Subcontractor regards the order as a change order.

3.3 Except as provided in this clause, no order, statement, or conduct of Fermilab shall be treated as a change under this clause or entitle the Subcontractor to an equitable adjustment.

3.4 If any change under this clause causes an increase or decrease in the Subcontractor's cost of, or the time required for, the performance of any part of the work under this subcontract, whether or not changed by any such order, Fermilab shall make an equitable adjustment and modify the subcontract in writing. However, except for an adjustment based on defective specifications, no adjustment for any change under 3.2 above shall be made for any costs incurred more than 20 days before the Subcontractor gives written notice as required. In the case of defective specifications for which Fermilab is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Subcontractor in attempting to comply with the defective specifications.

3.5 The Subcontractor must assert its right to an adjustment under this clause, within 30 days after (a) receipt of a written change order under 3.1 above or (b) the furnishing of a written notice under 3.2 above, by submitting to Fermilab a written statement describing the general nature and amount of the proposal, unless this period is extended by Fermilab. The statement of proposal may be included in the notice under 3.2 above.

3.6 No claim by the Subcontractor for an equitable adjustment shall be allowed if asserted after final payment under this subcontract.

4. DIFFERING SITE CONDITIONS

4.1 (a) The Subcontractor shall promptly, and before the conditions are disturbed, give a written notice to Fermilab of:

- (i) Subsurface or latent physical conditions at the site differing materially from those indicated in this subcontract; or
- (ii) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in this subcontract.

4.2 Fermilab shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Subcontractor's cost of, or the time required for, performing any part of the work under this subcontract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the subcontract modified in writing accordingly.

4.3 No request by the Subcontractor for an equitable adjustment to the subcontract under this clause shall be allowed unless the Subcontractor has given the notice required, provided, that the time prescribed in (a) above for giving written notice may be extended by Fermilab.

4.4 No request by the Subcontractor for an equitable adjustment to the subcontract for differing site conditions shall be allowed if asserted after final payment under this subcontract.

5. SPECIFICATIONS AND DRAWINGS FOR CONSTRUCTION

5.1 The Subcontractor shall keep on the work site a copy of the drawings and specifications and shall at all times give Fermilab, its representatives and designees access thereto. Anything mentioned in the specifications and not shown on the drawings, or shown on the drawings and not mentioned in the specifications, shall be of like effect as if shown or mentioned in both. In case of difference between drawings and specifications, the specifications shall govern. In case of discrepancy in the figures in the drawings or in the specifications, the matter shall be promptly submitted to the Manager, who shall promptly make a determination in writing. Any adjustment by the Subcontractor without such a determination shall be at its own risk and expense. Fermilab shall furnish from time to time such detailed drawings and other information as considered necessary, unless otherwise provided.

5.2 Wherever in the specifications or upon the drawings the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription", of Fermilab is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import shall mean "approved by", or "acceptable to", or "satisfactory to" Fermilab unless otherwise expressly stated.

5.3 Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the drawings accompanying this subcontract unless stated otherwise. The word "provided" as used herein shall be understood to mean "provide complete in place", that is "furnished and installed".

5.4 Shop drawings means drawings, submitted to Fermilab by the Subcontractor or any lower tier sub-subcontractor pursuant to a construction subcontract, showing in detail (1) the proposed fabrication and assembly of structural elements and (2) the installation (i.e., form, fit, and attachment details) of materials of equipment. It includes drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, and similar materials furnished by the subcontractor to explain in detail specific portions of the work required by the subcontract. Fermilab may duplicate, use, and disclose in any manner and for any purpose shop drawings delivered under this subcontract.

5.5 If this subcontract requires shop drawings, the Subcontractor shall coordinate all such drawings, and review them for accuracy, completeness, and compliance with subcontract requirements and shall indicate its approval thereon as evidence of such coordination and review. Shop drawings submitted to Fermilab without evidence of the Subcontractor's approval may be returned for resubmission. Fermilab will indicate an approval or disapproval of the shop drawings and if not approved as submitted shall indicate Fermilab's reasons therefor. Any work done before such approval shall be at the Subcontractor's risk. Approval by Fermilab shall not relieve the Subcontractor from responsibility for any errors or omissions in such drawings, nor from responsibility for complying with the requirements of this subcontract, except with respect to variations described and approved in accordance with paragraph 5.6 following.

5.6 If shop drawings show variations from the subcontract requirements, the Subcontractor shall describe such variations in writing, separate from the drawings, at the time of submission. If Fermilab approves any such variation, Fermilab shall issue an appropriate subcontract modification, except that, if the variation is minor or does not involve a change in price or in time of performance, a modification need not be issued.

5.7 The Subcontractor shall submit to Fermilab for approval one reproducible and one copy (unless otherwise indicated) of all shop drawings as called for under the various headings of these specifications. One set (unless otherwise indicated) of all shop drawings, will be retained by Fermilab and the reproducible set will be returned to the Subcontractor. Upon completing the work under this subcontract, the Subcontractor shall furnish a complete set of all shop drawings as finally approved. These drawings shall show all changes and revisions made up to the time the equipment is completed and accepted.

5.8 This clause shall be included in all sub-subcontracts at any tier.

6. DEFAULT

6.1 If the Subcontractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence that will insure its completion within the time specified in this subcontract, including any extension, or fails to complete the work within that time, Fermilab may, by written notice to the Subcontractor, terminate the right to proceed with the work (or the separable part of the work) that has been delayed. In this event, Fermilab may take over the work and complete it by subcontract or otherwise, and may take possession of and use any materials, appliances, and plant on the work site necessary for completing the work. The Subcontractor and its sureties shall be liable for any damage to Fermilab and the Government resulting from the Subcontractor's refusal or failure to complete the work within the specified time, whether or not the Subcontractor's right to proceed with the work is terminated. This liability includes any increased costs incurred by Fermilab in completing the work.

6.2 The Subcontractor's right to proceed shall not be terminated nor the Subcontractor charged with damages under this clause, if:

(a) The delay in completing the work arises from unforeseeable causes beyond the control and without the fault or negligence of the Subcontractor. Examples of such causes include (i) acts of God or of the public enemy (ii) acts of the Government in its sovereign capacity, (iii) acts of Fermilab or another Fermilab Subcontractor in the performance of a subcontract with Fermilab, (iv) fires, (v) floods, (vi) epidemics, (vii) quarantine restrictions, (viii) strikes, (ix) freight embargoes, (x) unusually severe weather, or (xi) delays of sub-subcontractors or suppliers at any tier arising from unforeseeable causes beyond the control and without the fault or negligence of both the Subcontractor and the sub-subcontractors or suppliers; and

(b) The Subcontractor, within 10 days from the beginning of any delay (unless extended by Fermilab), notifies Fermilab in writing of the causes of delay. Fermilab shall ascertain the facts and the extent of delay. If, in the judgment of Fermilab, the findings of fact warrant such action, the time for completing the work shall be extended. The findings of Fermilab shall be final and conclusive on the parties.

6.3 If, after termination of the Subcontractor's right to proceed, it is determined that the Subcontractor was not in default, or that the delay was excusable, the rights and obligations of the parties will be the same as if the termination had been issued for the convenience of Fermilab.

6.4 The rights and remedies of Fermilab in this clause are in addition to any other rights and remedies provided by law or under this subcontract.

7. TERMINATION FOR CONVENIENCE OF FERMILAB (CONSTRUCTION)

7.1 Fermilab may terminate performance of work under this subcontract in whole or, from time to time, in part if it determines that a termination is in Fermilab's interest. Fermilab shall terminate by delivering to the Subcontractor a Notice of Termination specifying the extent of termination and the effective date.

7.2 After receipt of a Notice of Termination, and except as directed by Fermilab, the Subcontractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

- (1) Stop work as specified in the notice.
- (2) Place no further sub-subcontracts or orders (referred to as sub-subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the subcontract.

- (3) Terminate all sub-subcontracts to the extent they relate to the work terminated.
- (4) Assign to Fermilab, as directed by Fermilab, all right, title, and interest of the Subcontractor under the sub-subcontracts terminated, in which case Fermilab shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
- (5) With approval or ratification to the extent required by Fermilab, settle all outstanding liabilities and termination settlement proposals arising from the termination of sub-subcontracts; the approval or ratification will be final for purposes of this clause.
- (6) As directed by Fermilab, transfer title and deliver to Fermilab (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the subcontract had been completed, would be required to be furnished to Fermilab.
- (7) Complete performance of the work not terminated.
- (8) Take any action that may be necessary, or that Fermilab may direct, for the protection and preservation of the property related to this subcontract that is in the possession of the Subcontractor and in which the Government has or may acquire an interest.
- (9) Use its best efforts to sell, as directed or authorized by Fermilab, any property of the types referred to in previous subparagraph (6); *provided*, however, that the Subcontractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, Fermilab. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by Fermilab under this subcontract, credited to the price or cost of the work, or paid in any other manner directed by Fermilab.

7.3 After expiration of the plant clearance period as defined in Subpart 45.6 of the Federal Acquisition Regulation, the Subcontractor may submit to Fermilab a list, certified as to quantity and quality, of termination inventory not previously disposed of excluding items authorized for disposition by Fermilab. The Subcontractor may request Fermilab to remove those items or enter into an agreement for their storage. Within 15 days, Fermilab will accept title to those items and remove them or enter into a storage agreement. Fermilab may verify the list upon removal of the items, or if stored, within 45 days from submission of the list, and shall correct the list, as necessary, before final settlement.

7.4 After termination, the Subcontractor shall submit a final termination settlement proposal to Fermilab in the form and with the certification prescribed by Fermilab. The Subcontractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by Fermilab upon written request of the Subcontractor within this 1-year period. However, if Fermilab determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Subcontractor fails to submit the proposal within the time allowed, Fermilab may determine, on the basis of information available, the amount, if any, due the Subcontractor because of the termination and shall pay the amount determined.

7.5 Subject to paragraph 7.4 above, the Subcontractor and Fermilab may agree upon the whole or any part of the amount to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph 7.5 or paragraph 7.6 below, exclusive of costs shown in subparagraph 7.6 (2) below, may not exceed the total subcontract price as reduced by (a) the amount of payments previously made and (2) the subcontract price of work not terminated. The subcontract shall be amended, and the Subcontractor paid the agreed amount. Paragraph 7.6 below shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

7.6 If the Subcontractor and Fermilab fail to agree on the whole amount to be paid the Subcontractor because of the termination of work, Fermilab shall pay the Subcontractor the amounts determined as follows, but without duplication of any amounts agreed upon under paragraph 7.5 above:

- (1) For subcontract work performed before the effective date of termination, the total (without duplication of any items) of:
 - (i) The cost of this work;
 - (ii) The cost of settling and paying termination settlement proposals under terminated sub-subcontracts that are properly chargeable to the terminated portion of the subcontract if not included in (i) above; and
 - (iii) A sum, as profit on (i) above, determined by Fermilab under 49.202 of the Federal Acquisition Regulation, in effect on the date of this subcontract, to be fair and reasonable; however, if it appears that the Subcontractor would have sustained a loss on the entire subcontract had it been completed, Fermilab shall allow no profit under paragraph (iii) and shall reduce the settlement to reflect the indicated rate of loss.
- (2) The reasonable costs of settlement of the work terminated, including:
 - (i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
 - (ii) The termination and settlement of sub-subcontracts (excluding the amounts of such settlements); and
 - (iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

7.7 Except for normal spoilage, and except to the extent that Fermilab expressly assumed the risk of loss, Fermilab shall exclude from the amounts payable to the Subcontractor under paragraph 7.6 above, the fair value, as determined by Fermilab, of property that is destroyed, lost, stolen, or damaged so as to become undeliverable to Fermilab or to a buyer.

7.8 The cost principles and procedures of Part 31 of the Federal Acquisition Regulation, in effect on the date of this subcontract, shall govern all costs claimed, agreed to, or determined under this clause.

7.9 In arriving at the amount due the Subcontractor under this clause, there shall be deducted:

- (1) All unliquidated advance or other payments to the Subcontractor under the terminated portion of this subcontract;
- (2) Any claim which Fermilab has against the Subcontractor under this subcontract; and
- (3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Subcontractor or sold under the provisions of this clause and not recovered by or credited to Fermilab.

7.10 If the termination is partial, the Subcontractor may file a proposal with Fermilab for an equitable adjustment of the price(s) of the continued portion of the subcontract. Fermilab shall make any equitable adjustment agreed upon. Any proposal by the Subcontractor for an equitable adjustment under this clause shall be requested within 90 days from the effective date of termination unless extended in writing by Fermilab.

7.11 (1) Fermilab may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Subcontractor for the terminated portion of the subcontract, if Fermilab believes the total of these payments will not exceed the amount to which the Subcontractor will be entitled.

- (2) If the total payments exceed the amount finally determined to be due, the Subcontractor shall repay the excess to Fermilab upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Subcontractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Subcontractor's termination settlement proposal because of retention or other disposition of termination inventory until 10 days after the date of the retention or disposition, or a later date determined by Fermilab because of the circumstances.

7.12 Unless otherwise provided in this subcontract or by statute, the Subcontractor shall maintain all records and documents relating to the terminated portion of this subcontract for 3 years after final settlement. This includes all books and other evidence bearing on the Subcontractor's costs and expenses under the subcontract. The Subcontractor shall make these records and documents available to Fermilab, at the Subcontractor's office, at all reasonable times, without any direct charge. If approved by Fermilab, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

8. NON-WAIVER OF DEFAULTS

8.1 Any failure by Fermilab at any time, or from time to time, to enforce or require the strict keeping and performance of any of the terms or conditions of this subcontract shall not constitute a waiver of such terms or conditions and shall not affect or impair such terms or conditions in any way, or the right of Fermilab at any time to avail itself of such remedies as it may have for any breach or breaches of such terms or conditions.

9. INSPECTION OF CONSTRUCTION

9.1 Definition. "Work" includes, but is not limited to, materials, workmanship, and manufacture, and fabrication of components.

9.2 The Subcontractor shall maintain an adequate inspection system and perform such inspections as will ensure that the work performed under this subcontract conforms to subcontract requirements. The Subcontractor shall maintain complete inspection records and make them available to Fermilab. All work shall be conducted under the general direction of Fermilab and is subject to Fermilab inspection and test at all places and at all reasonable times before acceptance to ensure strict compliance with the terms of the sub-contract.

9.3 Fermilab inspections and tests are for the sole benefit of Fermilab and do not:

- (a) Relieve the Subcontractor of responsibility for providing adequate quality control measures;
- (b) Relieve the Subcontractor of responsibility for damage to or loss of the material before acceptance;
- (c) Constitute or imply acceptance; or
- (d) Affect the continuing rights of Fermilab after acceptance of the completed work under paragraph 9.9 below.

9.4 The presence or absence of a Fermilab inspector does not relieve the Subcontractor from any subcontract requirement, nor is the inspector authorized to change any term or condition of the specification without Fermilab's written authorization.

9.5 The Subcontractor shall promptly furnish, at no increase in subcontract price, all facilities, labor, and material reasonably needed for performing such safe and convenient inspections and tests as may be required by Fermilab. Fermilab may charge to the Subcontractor any additional cost of inspection or test when work is not ready at the time specified by the Subcontractor for inspection or test, or when prior rejection makes reinspection or retest necessary. Fermilab shall perform all inspections and tests in a manner that will not unnecessarily delay the work. Special, full size, and performance tests shall be performed as described in the subcontract.

9.6 The Subcontractor shall, without charge, replace or correct work found by Fermilab not to conform to subcontract requirements, unless in the public interest Fermilab consents to accept the work with an appropriate adjustment in subcontract price. The Subcontractor shall promptly segregate and remove rejected material from the premises.

9.7 If the Subcontractor does not promptly replace or correct rejected work, Fermilab may (1) by subcontract or otherwise, replace or correct the work and charge the cost to the Subcontractor or (2) terminate for default the Subcontractor's right to proceed.

9.8 If, before acceptance of the entire work, Fermilab decides to examine already completed work by removing it or tearing it out, the Subcontractor, on request, shall promptly furnish all necessary facilities, labor, and material. If the work is found to be defective or nonconforming in any material respect due to the fault of the Subcontractor or its sub-subcontractors, the Subcontractor shall defray the expenses of the examination and of satisfactory reconstruction. However, if the work is found to meet subcontract requirements, Fermilab shall make an equitable adjustment for the additional services involved in the examination and reconstruction, including, if completion of the work was thereby delayed, an extension of time.

9.9 Unless otherwise specified in the subcontract, Fermilab shall accept, as promptly as practicable after completion and inspection, all work required by the subcontract or that portion of the work Fermilab determines can be accepted separately. Acceptance shall be final and conclusive except for latent defects, fraud, gross mistakes amounting to fraud, or Fermilab's rights under any warranty or guarantee.

10. SUPERINTENDENCE BY SUBCONTRACTOR

10.1 At all times during performance of this contract and until the work is completed and accepted, the Subcontractor shall directly superintend the work or assign and have on the work a competent superintendent who is satisfactory to Fermilab and has authority to act for the Subcontractor.

10.2 The Subcontractor shall be responsible for maintaining prescribed safety standards, satisfactory standards of employee and sub-subcontractor competency, conduct and integrity, and shall be responsible for taking disciplinary action with respect to his or his sub-subcontractors' employees as may be necessary.

11. SELECTION OF SUB-SUBCONTRACTORS

11.1 At the request of Fermilab, the Subcontractor shall notify Fermilab, in writing, of the names of all sub-subcontractors, together with a summary of the extent and character of the work to be done by each sub-subcontractor. If, for sufficient reason at any time during the progress of the work, Fermilab, determines that any sub-subcontractor is incompetent or undesirable, it will notify the Subcontractor accordingly and immediate steps will be taken for cancellation of the sub-subcontract. Subletting by sub-subcontractors shall be subject to the same requirements. Nothing contained in this subcontract shall create any contractual relation between the sub-subcontractor and Fermilab.

12. OTHER SUBCONTRACTS

12.1 Fermilab, or the Government may undertake or award other contracts or subcontracts for additional work at or near the site of the work under this subcontract. The Subcontractor shall fully cooperate with the other contractors or Subcontractors and Fermilab employees and carefully adapt scheduling and performing the work under this subcontract to accommodate the additional work, heeding any direction that may be provided by Fermilab. The Subcontractor shall not commit or permit any act which will interfere with the performance of work by any other contractor or Subcontractor or by Fermilab employees. All Subcontractors shall have equal rights to use the haul roads, grounds, utilities, etc.

13. DAVIS-BACON ACT

13.1 All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Subcontractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics; subject to the provisions of 13.7; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits in the wage determination for the classification of work actually performed, without regard to skill, except as provided in Clause 16. APPRENTICES AND TRAINEES. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein; *provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under 13.2, 13.3 and 13.4) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Subcontractor and its sub-subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

13.2 Fermilab shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the subcontract shall be classified in conformance with the wage determination. The Department Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

- (a) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
- (b) The classification is utilized in the area by the construction industry; and
- (c) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

13.3 If the Subcontractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Department Contracting Officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Department Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Department Contracting Officer or will notify the Department Contracting Officer within the 30-day period that additional time is necessary.

13.4 In the event the Subcontractor, the laborers or mechanics to be employed in the classification or their representatives, and the Department Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the Department Contracting Of-

ficer shall refer the questions, including the views of all interested parties and the recommendation of the Department Contracting Officer, to the Administrator of the Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and will so advise the Department Contracting Officer or will notify the Department Contracting Officer within the 30-day period that additional time is necessary.

13.5 The wage rate (including fringe benefits where appropriate) determined pursuant to 13.3 or 13.4, shall be paid to all workers performing work in the classification under this subcontract from the first day on which work is performed in the classification.

13.6 Whenever the minimum wage rate prescribed in the subcontract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Subcontractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

13.7 If the Subcontractor does not make payments to a trustee or other third person, the Subcontractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; *provided*, that the Secretary of Labor has found upon the written request of the Subcontractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Subcontractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

13.8 DISPUTES CONCERNING LABOR STANDARDS. The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures. Disputes within the meaning of this clause include disputes between the Subcontractor (or any of its sub-subcontractors) and Fermilab, the Department, the U.S. Department of Labor, or the employees or their representatives.

14. WITHHOLDING OF FUNDS

14.1 The Department or Fermilab shall upon their own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Subcontractor under this subcontract or any other Federal contract with the same Subcontractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same Subcontractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Subcontractor or any sub-subcontractor the full amount of wages required by the subcontract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the subcontract, the Department or Fermilab may, after written notice to the Subcontractor, take such action as may be necessary to cause the suspension of any further payment, advance or guarantee of funds until such violations have ceased.

15. PAYROLLS AND BASIC RECORDS

15.1 Payrolls and basic records relating thereto shall be maintained by the Subcontractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid.

Whenever the Secretary of Labor has found, under paragraph 13.7 of the paragraph entitled "Davis-Bacon Act", that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the Subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

- 15.2** (a) The Subcontractor shall submit weekly for each week in which any subcontract work is performed, a copy of all payrolls to Fermilab. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph 15.1. This information may be submitted in any form desired. Optional form WH-347 (Federal Stock No. 029-005-00014-1) is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The Subcontractor is responsible for the submission of copies of payrolls by all sub-subcontractors.
- (b) Each payroll submitted shall be accompanied by a "Statement of Compliance", signed by the Subcontractor or sub-subcontractor or his or her agent who pays or supervises the payment of the persons employed under the subcontract and shall certify:
- (i) That the payroll for the payroll period contains the information required to be maintained under paragraph 15.1 and that such information is correct and complete;
 - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the subcontract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in regulations, 29 CFR Part 3; and
 - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the subcontract.
- (c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by para. 15.2.b above.
- (d) The falsification of any of the certifications in this paragraph may subject the Subcontractor or sub-subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 3729 of Title 31 of the United States Code.

15.3 The Subcontractor or sub-subcontractor shall make the records required under 15.1 available for inspection, copying, or transcription by authorized representatives of the Department or the Department of Labor. The Subcontractor or sub-subcontractor shall permit such representatives to interview employees during working hours on the job. If the Subcontractor or sub-subcontractor fails to

submit required records or to make them available, the Department and/or Fermilab may, after written notice to the Subcontractor, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

16. APPRENTICES AND TRAINEES

16.1 APPRENTICES. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Subcontractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Subcontractor's or sub-subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

16.2 TRAINEES. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed in the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the

payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate in the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

16.3 EQUAL EMPLOYMENT OPPORTUNITY. The utilization of apprentices, trainees and journeymen under this subcontract shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

17. COMPLIANCE WITH REGULATIONS

17.1 COMPLIANCE WITH COPELAND ACT REQUIREMENTS. The Subcontractor shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this subcontract.

17.2 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REQUIREMENTS. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are hereby incorporated by reference in this subcontract.

18. SUB-SUBCONTRACTS (LABOR STANDARDS)

18.1 The Subcontractor shall insert in any sub-subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Sub-subcontracts (Labor Standards), Subcontract Termination—Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as Fermilab may, by appropriate instructions, require, and also a clause requiring sub-subcontractors to include these clauses in any lower tier sub-subcontracts. The Subcontractor shall be responsible for compliance by any sub-subcontractor or lower tier sub-subcontractor with all the subcontract clauses cited in this paragraph.

- 18.2** (a) Within 14 days after award of the subcontract, the Subcontractor shall deliver to Fermilab a completed Statement and Acknowledgement Form (SF 1413) for each sub-subcontract, including the sub-subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph 18.1 of this clause have been included in the sub-subcontract.
- (b) Within 14 days after the award of any subsequently awarded sub-subcontract the Subcontractor shall deliver to Fermilab an updated completed SF 1413 for such additional sub-subcontract.

19. SUBCONTRACT TERMINATION: DEBARMENT

19.1 A breach of the subcontract clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act—Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Sub-subcontracts (Labor Standards), Compliance with Davis-Bacon and Related Act Regulations, or Certification of Eligibility may be grounds for termination of the subcontract, and for debarment as a contractor and Subcontractor as provided in 29 CFR 5.12.

20. CERTIFICATION OF ELIGIBILITY

20.1 By entering into this subcontract, the Subcontractor certifies that neither it (nor he or she) nor any person or firm who

has an interest in the Subcontractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

20.2 No part of this subcontract shall be sub-subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

20.3 The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

21. APPROVAL OF WAGE RATES

21.1 All straight time wage rates, and overtime rates based thereon, for laborers and mechanics engaged in work under this subcontract must be submitted for approval in writing by the head of the contracting activity or a representative expressly designated for this purpose, if the straight time wages exceed the rates for corresponding classifications contained in the applicable Davis-Bacon Act minimum wage determination included in the subcontract. Any amount paid by the Subcontractor to any laborer or mechanic in excess of the Department approved wage rate shall be at the expense of the Subcontractor and shall not be reimbursed by Fermilab. If Fermilab refuses to authorize the use of the overtime, the Subcontractor is not released from the obligation to pay employees at the required overtime rates for any overtime actually worked.

22. SUSPENSION OF WORK

22.1 Fermilab may order the Subcontractor, in writing, to suspend, delay, or interrupt all or any part of the work of this subcontract for the period of time that Fermilab determines appropriate for its convenience.

22.2 If the performance of all or any part of the work is, for any unreasonable period of time, suspended, delayed, or interrupted (1) by an act of Fermilab in the administration of this subcontract, or (2) by its failure to act within the time specified in this subcontract (or within a reasonable time if not specified), an adjustment shall be made for an increase in the cost of performance of this subcontract (excluding profit) necessarily caused by the unreasonable suspension, delay or interruption and the subcontract modified in writing accordingly. However, no adjustment shall be made under this clause for any suspension, delay or interruption to the extent that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the Subcontractor, or for which an equitable adjustment is provided for or excluded under any other term or condition of this subcontract.

22.3 A claim under this clause shall not be allowed (1) for any costs incurred more than 20 days before the Subcontractor shall have notified Fermilab in writing of the act or failure to act involved (but this requirement shall not apply as to a claim resulting from a suspension order), and (2) unless the claim, in an amount stated, is asserted in writing as soon as practicable after the termination of the suspension, delay, or interruption, but no later than the date of final payment under the subcontract.

23. SCHEDULES FOR CONSTRUCTION SUBCONTRACTS

23.1 The Subcontractor shall, within five days after the work commences on the subcontract or another period of time determined by Fermilab, prepare and submit to Fermilab for approval three copies of a practicable schedule showing the order in which the Subcontractor proposes to perform the work,

and the dates on which the Subcontractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Subcontractor fails to submit a schedule within the time prescribed, Fermilab may withhold approval of progress payments until the Subcontractor submits the required schedule.

23.2 The Subcontractor shall enter the actual progress on the chart as directed by Fermilab, and upon doing so shall immediately deliver three copies of the annotated schedule to Fermilab. If, in the opinion of Fermilab, the Subcontractor falls behind the approved schedule, the Subcontractor shall take steps necessary to improve its progress, including those that may be required by Fermilab, without additional cost to Fermilab. In this circumstance, Fermilab may require the Subcontractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as Fermilab deems necessary to demonstrate how the approved rate of progress will be regained.

23.3 Failure of the Subcontractor to comply with the requirements of Fermilab under this clause shall be grounds for a determination by Fermilab that the Subcontractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the Subcontract. Upon making this determination, Fermilab may terminate the Subcontractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this subcontract.

24. PERMITS AND RESPONSIBILITIES

24.1 Except as otherwise directed by Fermilab, the Subcontractor shall without additional expense to Fermilab, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State and municipal laws, codes and regulations applicable to the performance of the work. The Subcontractor shall also be responsible for all damages to persons or property that occur as a result of the Subcontractor's fault or negligence, and shall take proper safety and health precautions to protect the work, the workers, the public, and the property of others. The Subcontractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire construction work, except for any completed unit of work which may have been accepted under the subcontract. The cost of any such protection shall be deemed to be included in the subcontract price.

25. BUY AMERICAN ACT – CONSTRUCTION MATERIALS UNDER TRADE AGREEMENTS

25.1 DEFINITIONS. As used in this clause –

“Components” means any article, material, or supply incorporated directly into construction materials.

“Construction material” means an article, material, or supply brought to the construction site by the Subcontractor or sub-subcontractor for incorporation into the building or work. The term also includes an item brought to the site preassembled from articles, materials, or supplies. However, emergency life safety systems, such as emergency lighting, fire alarm, and audio evacuation systems, that are discrete systems incorporated into a public building or work and that are produced as complete systems, are evaluated as a single and distinct construction material regardless of when or how the individual parts or components of those systems are delivered to the construction site. Materials purchased directly by Fermilab are supplies, not construction material.

“Cost of components” means–

- (1) For components purchased by the Subcontractor, the

acquisition cost, including transportation costs to the place of incorporation into the end product (whether or not such costs are paid to a domestic firm), and any applicable duty (whether or not a duty-free entry certificate is issued); or

- (2) For components manufactured by the Subcontractor, all costs associated with the manufacture of the component, including transportation costs as described in paragraph (1) of this definition, plus allocable overhead costs, but excluding profit. Cost of components does not include any costs associated with the manufacture of the end product.

“Designated country” means any of the following countries:

Aruba	Germany	Netherlands
Austria	Greece	Niger
Bangladesh	Guinea	Norway
Belgium	Guinea-Bissau	Portugal
Benin	Haiti	Rwanda
Bhutan	Hong-Kong	Sao Tome and Principe
Botswana	Ireland	Sierra Leone
Burkina Faso	Israel	Singapore
Burundi	Italy	Somolia
Canada	Japan	Spain
Cape Verde	Kiribati	Sweden
Central African Republic	Korea, Republic of	Switzerland
Chad	Lesotho	Tanzania U.R.
Comoros	Liechtenstein	Togo
Denmark	Luxembourg	Tuvalu
Djibouti	Malawi	Uganda
Equatorial Guinea	Maldives	United Kingdom
Finland	Mali	Vanuatu
France	Mozambique	Western Samoa
Gambia	Nepal	Yeman

“Designated country construction material” means a construction material that

- (1) Is wholly the growth, product, or manufacture of a designated country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a designated country into a new and different construction material distinct from the materials from which it was transformed.

“Domestic construction material” means

- (1) An unmanufactured construction material mined or produced in the United States; or
- (2) A construction material manufactured in the United States, if the cost of its components mined, produced, or manufactured in the United States exceeds 50 percent of the cost of all its components. Components of foreign origin of the same class or kind of which non-availability determinations have been made are treated as domestic.

“Foreign construction material” means a construction material other than a domestic construction material.

“North American Free Trade Agreement country” means Canada or Mexico.

“North American Free Trade Agreement country construction material” means a construction material that –

- (1) Is wholly the growth, product, or manufacture of a North American Free Trade Agreement (NAFTA) country; or
- (2) In the case of a construction material that consists in whole or in part of materials from another country, has been substantially transformed in a NAFTA country into a new and different construction material distinct from the materials from which it was transformed.

“United States” means the 50 States, the District of Columbia, and outlying areas (see paragraph 1.2 of the FL-1).

25.2 CONSTRUCTION MATERIALS.

- (a) This clause implements the Buy American Act (41 U.S.C. 10a-10d) by providing a preference for domestic construction material. In addition, the U.S. Government has determined that the Trade Agreements Act and the North American Free Trade Agreement (NAFTA) apply to this acquisition. Therefore, the Buy American Act restrictions are waived for designated country and NAFTA country construction materials.
- (b) The Subcontractor shall use only domestic, designated country, or NAFTA country construction material in performing this subcontract, except as provided in paragraphs 25.2(c) and 25.2(d) of this clause.
- (c) The requirement in paragraph 25.2(b) of this clause does not apply to the construction materials or components listed by Fermilab as follows:

None

- (d) Fermilab may add other foreign construction material to the list in paragraph 25.2(c) of this clause if Fermilab determines that –
 - (1) The cost of domestic construction material would be unreasonable. The cost of a particular domestic construction material subject to the restrictions of the Buy American Act is unreasonable when the cost of such material exceeds the cost of foreign material by more than 6 percent.
 - (2) The application of the restriction of the Buy American Act to a particular construction material would be impracticable or inconsistent with the public interest; or
 - (3) The construction material is not mined, produced, or manufactured in the United States in sufficient and reasonably available commercial quantities of a satisfactory quality.

25.3 REQUEST FOR DETERMINATION OF INAPPLICABILITY OF THE BUY AMERICAN ACT.

- (a) (1) Any Subcontractor request to use foreign construction material in accordance with paragraph 25.2(d) of this clause shall include adequate information for Fermilab evaluation of the request, including –
 - (A) A description of the foreign and domestic construction materials;
 - (B) Unit of measure;
 - (C) Quantity;
 - (D) Price;
 - (E) Time of delivery or availability;
 - (F) Location of the construction project;
 - (G) Name and address of the proposed supplier; and
 - (H) A detailed justification of the reason for use of foreign construction materials cited in accordance with paragraph 25.2(c) of this clause.
- (2) A request based on unreasonable cost shall include a reasonable survey of the market and a completed price comparison table in the format in paragraph 25.4 of this clause.
- (3) The price of construction material shall include all

delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate may be issued).

- (4) Any Subcontractor request for a determination submitted after subcontract award shall explain why the Subcontractor could not reasonable foresee the need for such determination and could not have requested the determination before subcontract award. If the Subcontractor does not submit a satisfactory explanation, Fermilab need not make a determination.
- (b) If Fermilab determines after subcontract award that an exception to the Buy American Act applies and Fermilab and the Subcontractor negotiate adequate consideration, Fermilab will modify the subcontract to allow use of the foreign construction material. However, when the basis for the exception is the unreasonable price of a domestic construction material, adequate consideration is not less than the differential established in paragraph 25.2(d)(1) of this clause.
- (c) Unless Fermilab determines that an exception to the Buy American Act applies, use of foreign construction material is noncompliant with the Buy American Act.

25.4 DATA. To permit evaluation of requests under paragraph 25.3 of this clause based on unreasonable cost, the Subcontractor shall include the following information and any applicable supporting data based on the survey of suppliers:

FOREIGN AND DOMESTIC CONSTRUCTION MATERIALS PRICE COMPARISON

Construction Material Description	Unit of Measure	Quantity	Price (Dollars)
Item 1:			
Foreign construction material			
Domestic construction material			
Item 2:			
Foreign construction material			
Domestic construction material			

List name, address, telephone number, and contact for suppliers surveyed. Attach copy of response; if oral, attach summary.

Include other applicable supporting information.

* Include all delivery costs to the construction site and any applicable duty (whether or not a duty-free certificate is issued).

26. WARRANTY OF CONSTRUCTION

26.1 In addition to any other warranties in this subcontract, the Subcontractor warrants, except as provided in paragraph 26.9 of this clause, that work performed under this subcontract conforms to the subcontract requirements and is free of any defect in equipment, material, or design furnished, or workmanship performed by the Subcontractor or any sub-subcontractor or supplier at any tier.

26.2 This warranty shall continue for a period of 1 year from the date of final acceptance of the work. If Fermilab takes possession of any part of the work before final acceptance, this warranty shall continue for a period of 1 year from the date Fermilab takes possession.

26.3 The Subcontractor shall remedy at the Subcontractor's expense any failure to conform, or any defect. In addition, the Subcontractor shall remedy at the Subcontractor's expense any damage to Government-owned or controlled real or personal property, when that damage is the result of –

- (a) The Subcontractor's failure to conform to subcontract requirements; or
- (b) Any defect of equipment, material, workmanship, or design furnished.

26.4 The Subcontractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Subcontractor's warranty with respect to work repaired or replaced will run for 1 year from the date of repair or replacement.

26.5 Fermilab shall notify the Subcontractor, in writing, within a reasonable time after the discovery of any failure, defect, or damage.

26.6 If the Subcontractor fails to remedy any failure, defect, or damage within a reasonable time after receipt of notice, Fermilab shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Subcontractor's expense.

26.7 With respect to all warranties, express or implied, from sub-subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Subcontractor shall –

- (a) Obtain all warranties that would be given in normal commercial practice;
- (b) Require all warranties to be executed, in writing, for the benefit of Fermilab and the Government, if directed by Fermilab; and
- (c) Enforce all warranties for the benefit of Fermilab, if directed by Fermilab.

26.8 In the event the Subcontractor's warranty under paragraph 26.2 of this clause has expired, Fermilab may bring suit at its expense to enforce a sub-subcontractor's, manufacturer's, or supplier's warranty.

26.9 Unless a defect is caused by the negligence of the Subcontractor or sub-subcontractor or supplier at any tier, the Subcontractor shall not be liable for the repair of any defects of material or design furnished by Fermilab nor for the repair of any damage that results from any defect in Fermilab-furnished material or design.

26.10 This warranty shall not limit Fermilab's rights under the inspection and acceptance provisions of Para. 9, Inspection of Construction of this subcontract with respect to latent defects, gross mistakes, or fraud.

26.11 Defects in design or manufacture of equipment specified by Fermilab on a "brand name and model" basis, shall not be included in this warranty. In this event, the Subcontractor shall require and sub-subcontractors, manufacturers, or suppliers thereof to execute their warranties, in writing, directly to Fermilab.

27. USE AND POSSESSION PRIOR TO COMPLETION

27.1 Fermilab shall have the right to take possession of or use any completed or partially completed part of the work. Before taking possession of or using any work, Fermilab shall fur-

nish the Subcontractor a list of items of work remaining to be performed or corrected on those portions of the work that Fermilab intends to take possession of or use. However, failure of Fermilab to list any item of work shall not relieve the Subcontractor of responsibility for complying with the terms of the subcontract. Fermilab's possession or use shall not be deemed an acceptance of any work under the subcontract.

27.2 While Fermilab has such possession or use, the Subcontractor shall be relieved of the responsibility for the loss of or damage to the work resulting from Fermilab's possession or use, notwithstanding the terms of the clause in this subcontract entitled "Permits and Responsibilities." If prior possession or use by Fermilab delays the progress of the work or causes additional expense to the Subcontractor, an equitable adjustment shall be made in the subcontract price or the time of completion, and the subcontract shall be modified in writing accordingly.

28. BONDS

28.1 The Subcontractor at his sole cost and expense shall furnish Payment and Performance Bonds in such forms and with such sureties as are acceptable to the Manager.

- 28.2** (a) The penal amount of the Performance Bond shall be in an amount equal to 100 percent of the subcontract price.
- (b) The penal amount of the Payment Bond shall also be in an amount equal to 100 percent of the subcontract price.

28.3 The Manager may require additional performance and payment bond protection when the subcontract price is increased. The increase in protection shall generally equal 100 percent of the increase in the subcontract price.

28.4 Said bonds shall be delivered to the Manager within ten (10) days after the effective date of the subcontract or within such time as allowed by the Manager in writing, and in any event prior to commencement of work under this subcontract.

28.5 If any surety on said bonds becomes unacceptable to Fermilab or if the subcontract price is substantially increased after such bonds are delivered, the Subcontractor shall promptly deliver such acceptable additional bond security as the Manager may require.

28.6 Failure to deliver acceptable bonds within the time allowed shall constitute a material breach of this subcontract and entitle Fermilab to (i) terminate the Subcontractor's right to proceed with the work, and (ii) recover from the Subcontractor any damage resulting from such breach.

29. INSURANCE

29.1 The Subcontractor at his sole cost and expense shall take out and maintain insurance until the work hereunder is completed and is accepted by the Manager.

29.2 At the signing and delivery of this subcontract, and in any event before any work is performed hereunder, the Subcontractor shall furnish to the Manager certificates of insurance, identified as to subcontract number, as evidence of insurance coverage of the type and in amounts not less than the amounts hereinafter specified:

TYPE OF INSURANCE	COVERAGE
(1) Comprehensive General Liability	Combined Single Limit for Bodily Injury, Personal Injury, and Property Damage – \$500,000 per Occurrence
(2) Automobile Liability	Same as (1)
(3) Workmen's Compensation	As Required by State Law
(4) Employer's Liability (sometimes referred to as "1(b) coverage")	\$500,000 per Insuring Agreement

29.3 The certificates of insurance shall provide that such insurance will not be cancelled nor any change whatsoever will be made in the policies except upon not less than thirty (30) days prior notice thereof to Fermilab, mailed to it by certified mail, with postage prepaid, addressed to the Manager, Fermi National Accelerator Laboratory, P. O. Box 500, Batavia, Illinois 60510.

29.4 Except for the Workmen's Compensation insurance, all policies shall by appropriate language provide that the United States Government and Universities Research Association, Inc. (URA) are additional insureds, that the insurance afforded by such policies is primary insurance, and that all rights of the insurer for contribution from other insurers of URA and the Government are waived.

29.5 Before permitting any sub-subcontractor to perform any work under this subcontract, the Subcontractor shall require that such sub-subcontractor furnish satisfactory evidence that it has taken out and maintains insurance in the same amounts and with the same provisions as required by the preceding paragraph of this clause.

29.6 The Subcontractor shall indemnify Fermilab for any expense incurred or loss suffered by Fermilab for the failure of the Subcontractor or any sub-subcontractor to comply with the provisions of this clause.

30. PHYSICAL DATA

30.1 Information and data set forth or referred to below are furnished for information only and it is expressly understood that Fermilab will not be responsible for any interpretation or conclusion drawn therefrom by the Subcontractor.

30.2 Structures and utilities shown on the drawings are in accordance with the best information available. Their number and exact locations are not guaranteed. Excavation during construction may reveal the presence of underground drainage tiles, culverts, utilities, and other underground obstructions. The Subcontractor shall request from Fermilab direction for rerouting, sealing or otherwise modifying underground obstructions not shown on the drawings. See clause of these Terms and Conditions, entitled "Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements."

30.3 The Subcontract price includes all costs for performing the work shown in the drawings and specifications. Any variations between costs estimated by the Subcontractor for replacing any land improvements or for excavation of topsoil and backfilling with specified materials, and actual costs encountered in performing the work, shall not constitute the basis for a claim for extra payment.

31. ENVIRONMENT, SAFETY, AND HEALTH (ES&H)

31.1 **APPLICABILITY.** This clause applies to all subcontract work performed at the Fermilab site. For the purpose of this clause:

- (a) safety encompasses environment, safety, and health, including pollution prevention and waste minimization; and
- (b) employees include sub-subcontractor employees at any tier.

31.2 **ES&H POLICY.** It is Fermilab policy that every Subcontractor employee is entitled to a safe and healthy work environment while on the Fermilab site, and that the Subcontractor retains primary responsibility for the safety of its employees. In performing work under this subcontract, the Subcontractor shall perform work safely, in a manner that ensures adequate protection for employees, the public, and the environment, and shall be accountable for the safe performance of work. The Subcontractor shall exercise a degree of care commensurate with the work and the associated hazards. The Subcontractor shall ensure that management of ES&H functions and activities becomes an integral but visible part of the Subcontractor's work planning and execution process. The Subcontractor shall, in the performance of work, ensure that –

- (a) Line management is responsible for the protection of employees, the public, and the environment. Line management includes those Subcontractor and sub-subcontractor employees managing or supervising employees performing work.
- (b) Clear and unambiguous lines of authority and responsibility for ensuring ES&H are established and maintained at all organizational levels.
- (c) Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
- (d) Resources are effectively allocated to address ES&H, programmatic, and operational considerations. Protecting employees, the public, and the environment is a priority whenever activities are planned and performed.
- (e) Before work is performed, the associated hazards are evaluated and ES&H standards and requirements are established which, if properly implemented, provide adequate assurance that employees, the public, and the environment are protected from adverse consequences.
- (f) Any necessary administrative and engineering controls to prevent and mitigate hazards are tailored to the work being performed and associated hazards. Emphasis should be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

31.3 **SUBMISSION OF FORMAL SAFETY MANAGEMENT SYSTEM, HAZARD ANALYSIS, OR ES&H PLAN.** In certain circumstances, Fermilab requires, either with the offer or prior to the commencement of on-site work, the submission for Fermilab approval of a documented Safety Management System and/or Hazard Analysis, or other equivalent ES&H Plan. A meeting with the Division/Section Senior Safety Officer and/or Task Manager or other Fermilab officials may also be required prior to the commencement of work to address the administration of ES&H requirements. If any of the above documents and meetings are required, such shall be identified, together with the required contents and information on submission and approval, elsewhere in this subcontract (e.g., in the scope of work, in the specifications, or in special provisions relating to the work to be performed). If this subcontract contains no such requirements, the Subcontractor shall nevertheless actively promote and enforce a comprehensive safety program for its on-site employees that includes an effective system for initial indoctrination and education of all of its on-site employees in safety and accident prevention, and other ES&H-related requirements found in this clause or elsewhere in this subcontract.

31.4 ES&H COMPLIANCE – “STOP WORK” AND “RESTART WORK” ORDERS.

- (a) When performing work on the Fermilab site under this subcontract, the Subcontractor shall take all reasonable precautions to protect the health and safety of employees and the public and to minimize the danger from hazards to life and property. The Subcontractor shall comply with all applicable ES&H and fire protection standards and requirements (including reporting requirements) set forth in Federal and State laws and regulations, in any required System, Analysis, or Plan (see 31.3 above), and elsewhere in this subcontract. Such standards and requirements include, but are not limited to –
 - (i) 40 C.F.R. (U.S. EPA)
 - (ii) 35 I.A.C. (Illinois EPA)
 - (iii) 29 C.F.R. 1910 and 1926 (OSHA)
 - (iv) 49 C.F.R. (DOT)
 - (v) National Fire Protection Association Codes (NFPA)
 - (vi) ANSI Z136.1 – Safe Use of Lasers
 - (vii) ANSI B30 Series – Crane Safety
 - (viii) ANSI/NFPA 70 – National Electrical Code
 - (ix) Illinois State “Rules of the Road” and the Illinois Vehicle Code.
- (b) The Subcontractor is responsible for compliance with the ES&H requirements applicable to this subcontract regardless of the performer of the work. The Subcontractor shall implement an appropriate system of ES&H inspections of its on-site work areas and employees, and shall promptly evaluate and resolve any noncompliance with requirements. Fermilab reserves the right to conduct, and the Subcontractor shall permit, safety inspections of the work being performed under this subcontract, and may notify the Subcontractor in writing of any noncompliance. If the Subcontractor fails to take timely and appropriate corrective action, or if, at any time, the Subcontractor’s acts or failure to act causes substantial harm or an imminent danger to the environment or health and safety of employees or the public, the Fermilab Division/Section Senior Safety Officer, the Fermilab Task Manager, or any other Fermilab official so authorized by the Fermilab Manager (see clause #1, “Definitions,” of the Fermilab FL-1) may, without prejudice to any other rights of Fermilab, issue an order stopping all or any part of the work. Thereafter, a restart order for resumption of the work may be issued at the discretion of the Fermilab Manager or other Fermilab official authorized by him/her. No extension of time or compensation for damages by reason of or in connection with such work stoppage will be allowed.

31.5 TRAINING AND EQUIPMENT. The Subcontractor is responsible for the provision of any necessary safety training, medical surveillance, and safety equipment for employees. The only exception involves hazards which are unusual for the trade of the employees. In particular, Fermilab normally provides appropriate training, medical surveillance, and special equipment for employees working in radiation areas or oxygen deficiency hazard areas.

31.6 EMERGENCY AND REPORTING PROCEDURES.

- (a) Emergency Reporting – In the event of any emergency situation, such as fire, gas release, chemical spill, or medical emergency, **call x3131** from any on-site telephone. From an outside line, call (630) 840-3131.
- (b) Medical Emergencies – Subcontractor employees will obtain their medical care from sources other than Fermilab, except in the case of severe injuries or life-threatening circumstances where the Fermilab paramedic unit is available to respond by calling x3131.
- (c) Incident Reporting – In addition to any other reporting requirements set forth in statutes or regulations or elsewhere in this subcontract, the Subcontractor shall maintain an accurate record of all incidents and submit to the Fermilab Division/Section Senior Safety Officer and/or Fermilab Task Manager, within two days from the time of occurrence on all proper forms as prescribed by Fermilab, all pertinent information on any reportable (as defined by OSHA) injury. The Subcontractor shall notify the above Senior Safety Officer or Task Manager immediately upon the occurrence of any accident resulting in death, occupational injury or illness, or damage to materials, property, supplies and equipment. This immediate notice shall be verbal, followed by written confirmation on the prescribed Fermilab forms.
- (d) Work Hours Reporting – Unless advised otherwise by the Fermilab Manager, the Subcontractor shall report to the Fermilab Task Manager or other Fermilab official designated by the Fermilab Manager the number of hours worked on the Fermilab site by Subcontractor employees and by sub-subcontractor employees at any tier under this subcontract. Such reporting shall be on a monthly basis (submitted by the fifth business day of the month) and in such form or format as prescribed by Fermilab.

31.7 GOVERNMENT AGENCY INSPECTION. The Subcontractor shall cooperate with Federal and non-Federal agencies having jurisdiction over ES&H matters under this subcontract. Should any representative of a Government agency, such as an OSHA Compliance Officer, visit the job site, regardless of reason, the Subcontractor shall –

- (a) Immediately (and prior to any inspection, if possible) alert the Division/Section Senior Safety Officer and/or Task Manager that a representative from a Government agency is at the job site. Fermilab reserves the right to be present during any Government agency inspection.
- (b) Advise Fermilab of the reason for the agency’s visit, as an example, an employee complaint, hospitalization of five or more Subcontractor employees, a fatality, or an “at random” inspection.
- (c) Provide Fermilab with a written follow-up report of the visit. The report should contain the details of the agency’s findings, recommendations, citations, etc.
- (d) Provide Fermilab with the Subcontractor’s intended action to comply with the agency’s recommendations. Copies of all governmental citations and inspection reports shall be promptly sent to Fermilab.

31.8 HAZARD COMMUNICATION. Before bringing any hazardous chemical (e.g., flammable, corrosive, reactive, toxic, radioactive, etc.) onto Fermilab property, the Subcontractor shall provide the Division/Section Senior Safety Officer or Task Manager with a Material Safety Data Sheet for the chemical. All chemicals must be properly labeled.

31.9 GENERAL RULES OF CONDUCT. While on-site, personnel of the Subcontractor and of sub-subcontractors at any tier shall conduct themselves in a professional manner that does not constitute a hazard to other such personnel, to Fermilab employees or property, or to the public. Such personnel also shall use direct access routes to job sites, shall refrain from disrupting other Fermilab activities and work areas while on-site for the performance of this subcontract, and shall observe all Fermilab regulations and restrictions concerning smoking and the possession or use of alcoholic beverages, narcotics, or any non-prescribed controlled substance. Such personnel shall immediately report to Fermilab any damage to existing Fermilab property that may disrupt Fermilab operations, cause fires, initiate environmental problems, or endanger lives. Fermilab reserves the right to remove, or to order the Subcontractor to remove, any such personnel who repeatedly or flagrantly violates safe work practices and procedures, and the Subcontractor shall not be afforded any extension of time or compensation for damages or other payment by reason of, or in connection with, such removal from the Fermilab site.

31.10 The Subcontractor agrees to include, or to require the inclusion of, provisions substantially similar to this clause in all sub-subcontracts at any tier under this subcontract which involve the performance of work on the Fermilab site.

32. PROJECT BULLETIN BOARD

32.1 The Subcontractor shall furnish, install and maintain during the entire period covered by this subcontract a weather-tight bulletin board approximately 3 feet high and 5 feet long. It shall be mounted in a conspicuous place, as approved by Fermilab, accessible to all employees of the Subcontractor and sub-subcontractors. This bulletin board may also be used for other notices, and will remain the property of the Subcontractor. The following notices shall be displayed at all times:

- (a) Equal Employment Opportunity poster.
- (b) Schedule of Minimum Wage Rates as required by the Davis-Bacon Act.
- (c) Safety Posters.
- (d) Official announcements and notices.

32.2 Any additional government-furnished notices, or publications by others in the interest of workmen shall be displayed.

33. CLEANING UP

33.1 The Subcontractor shall at all times keep the construction area including storage areas, free from accumulations of waste materials.

33.2 Before completing the work, the Subcontractor shall remove from the work and premises any rubbish, tools, scaffolding, equipment, and materials that are not the property of Fermilab.

33.3 Upon completing the work, the Subcontractor shall leave the work area in a clean, neat and orderly condition satisfactory to the Manager.

34. MATERIALS AND WORKMANSHIP

34.1 All materials, equipment and articles incorporated into the work covered by this subcontract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this subcontract. References in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition. The Subcontractor may, at its option, use any equipment, material, article, or process that, in the judgment of Fermilab, is equal to that named in the specifications, unless otherwise specifically provided in this subcontract.

34.2 The Subcontractor shall obtain Fermilab's approval of the machinery and mechanical and other equipment to be incorporated into the work. When requesting approval, the Subcontractor shall furnish to Fermilab the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the machinery and mechanical and other equipment. When required by this subcontract or by Fermilab, the Subcontractor shall also obtain Fermilab's approval of the material or articles which the Subcontractor contemplates incorporating into the work. When requesting approval, the Subcontractor shall provide full information concerning the material or articles. When directed to do so, the Subcontractor shall submit samples for approval at the Subcontractor's expense, with all shipping charges prepaid. Machinery, equipment, material, and articles that do not have the required approval shall be installed or used at the risk of subsequent rejection.

34.3 All work under this subcontract shall be performed in a skillful and workmanlike manner. Fermilab may require, in writing, that the Subcontractor remove from the work any employee Fermilab deems incompetent, careless, or otherwise objectionable.

35. PROTECTION OF EXISTING VEGETATION, STRUCTURES, EQUIPMENT, UTILITIES AND IMPROVEMENTS

35.1 The Subcontractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which are not to be removed and which do not unreasonably interfere with the work required under this subcontract. The Subcontractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during subcontract performance, or by the careless operation of equipment, or by workmen, the Subcontractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by Fermilab.

35.2 The Subcontractor shall protect from damage all existing improvements and utilities (1) at or near the work site and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Subcontractor. The Subcontractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this subcontract or failure to exercise reasonable care in performing the work. If the Subcontractor fails or refuses to repair the damage promptly, Fermilab may have the necessary work performed and charge the cost to the Subcontractor.

36. LAYOUT OF WORK

36.1 The Subcontractor shall lay out its work from Fermilab-established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Subcontractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Subcontractor shall be responsible for executing the work to the lines and grades that may be established or indicated by Fermilab. The Subcontractor shall also be responsible for maintaining and preserving all stakes and other marks established by Fermilab until authorized to remove them. If such marks are destroyed by the Subcontractor or through its negligence before their removal is authorized, Fermilab may replace them and deduct the expense of the replacement from any amounts due or to become due to the Subcontractor.

37. AVAILABILITY AND USE OF UTILITY SERVICES

37.1 Fermilab shall make all reasonably required amounts of utilities available to the Subcontractor from existing outlets and supplies, as specified in the subcontract. Unless otherwise provided in the subcontract, the amount of each utility service consumed shall be charged to or paid for by the Subcontractor at prevailing rates charged to the Fermilab or, where the utility is produced by Fermilab, at reasonable rates determined by Fermilab. The Subcontractor shall carefully conserve any utilities furnished without charge.

37.2 The Subcontractor, at its expense and in a workmanlike manner satisfactory to Fermilab, shall install and maintain all necessary temporary connections and distribution lines, and all meters required to measure the amount of each utility used for the purpose of determining charges. Before final acceptance of the work by Fermilab, the Subcontractor shall remove all the temporary connections, distribution lines, meters, and associated paraphernalia.

38. TRASH DISPOSAL

38.1 No burning, dumping, or disposal of trash will be permitted on Fermilab property. The disposal of regulated waste generated from the use of materials provided by Fermilab (Government property) shall be the responsibility of the designated Fermilab representative. Disposal of all other trash and waste materials generated during the performance of this subcontract shall be the responsibility of the Subcontractor and must be performed in compliance with all applicable federal, state and local laws and regulations. These statutes include, but are not limited to, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, the Hazardous Materials Transportation Act, the Illinois Environmental Protection Act/Solid and Special Waste Management Regulations, and the laws and regulations of any other state receiving regulated waste material generated during the performance of this subcontract.

39. OPERATIONS AND STORAGE AREAS

39.1 The Subcontractor shall confine all operations (including storage of materials) on Fermilab premises to areas authorized or approved by Fermilab. The Subcontractor shall hold and save Fermilab and the Government, its officers and agents, free and harmless from liability of any nature occasioned by the Subcontractor's performance.

39.2 Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be erected by the Subcontractor only with the approval of Fermilab and shall be built with labor and materials furnished by the Subcontractor without expense to Fermilab. The temporary buildings and utilities shall remain the property of the

Subcontractor and shall be removed by the Subcontractor at its expense upon completion of the work. With the written consent of Fermilab, the buildings and utilities may be abandoned and need not be removed.

39.3 The Subcontractor shall, under regulations prescribed by Fermilab, use only established roadways and use such temporary roadways constructed by the Subcontractor when and as may be authorized by Fermilab. Where materials are transported in prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicles or prescribed by any Federal, State or local law or regulation. When it is necessary to cross curbs or sidewalks, the Subcontractor shall protect them from damage. The Subcontractor shall repair or pay for the repair of any damaged curbs, sidewalks or roads.

40. AFFIRMATIVE ACTION COMPLIANCE REQUIREMENTS FOR CONSTRUCTION

40.1 Definitions. As used in this clause:

- (a) "Covered area" means the geographical area described in the solicitation for this subcontract and in paragraph 40.18 hereof;
- (b) "Director," means Director, Office of Federal Contract Compliance Programs (OFCCP), United States Department of Labor, or any person to whom the Director delegates authority;
- (c) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941;
- (d) "Minority" includes:
 - (i) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification);
 - (ii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands);
 - (iii) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin); and
 - (iv) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race).

40.2 If Subcontractor, or a sub-subcontractor at any tier, subcontracts a portion of the work involving any construction trade, each such sub-subcontract in excess of \$10,000 shall include this clause and the Notice which contains the applicable goals for minority and female participation stated in the solicitation for subcontract.

40.3 If the Subcontractor is participating in a Hometown Plan (41 CFR 60-4) approved by the U.S. Department of Labor in a covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals) shall comply with the Plan for those trades that have unions participating in the Plan. Subcontractors must be able to demonstrate participation in and compliance with the provisions of the Plan. Each Subcontractor or sub-subcontractor participating in an approved Plan is individually required to comply with its obligations under the Equal Opportunity clause, and to make a good faith

effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Subcontractors or sub-subcontractors toward a goal in an approved Plan does not excuse any Subcontractor's or sub-subcontractor's failure to take good faith efforts to achieve the Plan's goals.

40.4 The Subcontractor shall implement the specific affirmative action procedures provided in paragraph 40.7a through 40.7p of this clause. The goals set forth in the solicitation for this subcontract are expressed as percentages of the total hours of employment and training of minority and female utilization the Subcontractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. If the Subcontractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for the geographical area where that work is actually performed. The Subcontractor is expected to make substantially uniform progress toward its goal in each craft.

40.5 Neither the terms and conditions of any collective bargaining agreement, nor the failure by a union with which the Subcontractor has a collective bargaining agreement, to refer minorities or women shall excuse the Subcontractor's obligations under this clause, Executive Order 11246, as amended, or the regulations thereunder.

40.6 In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Subcontractor during the training period, and the Subcontractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.

40.7 The Subcontractor shall take affirmative actions to ensure equal employment opportunity. The evaluation of the Subcontractor's compliance with this clause shall be based upon its effort to achieve maximum results from its actions. The Subcontractor shall document these efforts fully, and implement affirmative action steps at least as extensive as the following:

- (a) Ensure a working environment free of harassment, intimidation, and coercion at all sites; and in all facilities at which the subcontractor's employees are assigned to work. The Subcontractor, if possible, will assign two or more women to each construction project. The Subcontractor shall ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Subcontractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at these sites or facilities.
- (b) Establish and maintain a current list of sources for minority and female recruitment. Provide written notification to minority and female recruitment sources and to community organizations when the Subcontractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
- (c) Establish and maintain a current file of the names, addresses, and telephone numbers of each minority and female off-the-street applicant, referrals of minorities or females from unions, recruitment sources, or community organizations and the action taken with respect to each such individual. If an individual was sent to the union hiring hall for referral and was not referred back to the Subcontractor by the union or, if referred, not employed by the Subcontractor, this shall be documented in the file, along with whatever additional actions the Subcontractor may have taken.

- (d) Immediately notify the Director when the union or unions with which the Subcontractor has a collective bargaining agreement has not referred to the Subcontractor a minority or woman sent by the Subcontractor, or when the Subcontractor has other information that the union referral process has impeded the Subcontractor's efforts to meet its obligations.
- (e) Develop on-the-job training opportunities and/or participate in training programs for the area that expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Subcontractor's employment needs, especially those programs funded or approved by the Department of Labor. The Subcontractor shall provide notice of these programs to the sources compiled under 40.7b above.
- (f) Disseminate the Subcontractor's EEO policy by
 - (i) Providing notice of the policy to unions and training recruitment and outreach programs and requesting their cooperation in assisting the Subcontractor in meeting its contract obligations;
 - (ii) Including the policy in any policy manual and collective bargaining agreements;
 - (iii) Publicizing the policy in the company newspaper, annual report, etc;
 - (iv) Reviewing the policy with all management personnel and with all minority and female employees at least once a year, and
 - (v) Posting the policy on bulletin boards accessible to all employees at each location where construction work is performed.
- (g) Review, at least annually, the Subcontractor's equal employment policy and affirmative action obligations with all employees having responsibility for hiring, assignment, layoff, termination or other employment decisions. Conduct review of this policy with all on-site supervisory personnel before initiating construction work at a job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (h) Disseminate the Subcontractor's equal employment policy externally by including it in any advertising in the news media, specifically including minority and female news media. Provide written notification to, and discuss this policy with other Subcontractors and sub-subcontractors with whom the Subcontractor does or anticipates doing business.
- (i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Subcontractor's recruitment area and employment needs. Not later than one month prior to the date for acceptance of applications for apprenticeship or other training by any recruitment source, send written notification to organizations such as the above, describing the opening, screening procedures, and tests to be used in the selection process.
- (j) Encourage present minority and female employees to recruit other minority persons and women. Where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Subcontractor's workforce.

- (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- (l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities. Encourage these employees to seek or to prepare for, through appropriate training, etc., opportunities for promotion.
- (m) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment-related activities to ensure that the Subcontractor's obligations under this subcontract are being carried out.
- (n) Ensure that all facilities and company activities are nonsegregated except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
- (o) Maintain a record of solicitations for sub-subcontracts for minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- (p) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Subcontractor's equal employment policy and affirmative action obligations.

40.8 The Subcontractor is encouraged to participate in voluntary associations that assist in fulfilling one or more of the affirmative action obligations contained in 40.7a through 40.7p. The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Subcontractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 40.7a through 40.7p provided the Subcontractor, (i) actively participates in the group, (ii) makes every effort to ensure that the group has a positive impact on the employment of minorities and women in the industry, (iii) ensures that the concrete benefits of the program are reflected in the Subcontractor's minority and female workforce participation, (iv) makes a good faith effort to meet its individual goals and timetables and, (v) can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Subcontractor. The obligation to comply is the Subcontractor's and failure of such a group to fulfill an obligation shall not be a defense for the Subcontractor's non-compliance.

40.9 A single goal for minorities and a separate single goal for women shall be established. The Subcontractor is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Subcontractor may be in violation of the Executive Order 11246, as amended, if a particular group is employed in a substantially disparate manner.

40.10 The Subcontractor shall not use goals or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.

40.11 The Subcontractor shall not enter into any sub-subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246, as amended.

40.12 The Subcontractor shall carry out such sanctions and penalties for violation of this clause and of the Equal Opportunity Clause, including suspension, termination and cancellation of existing sub-subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the OFCCP. Any Subcontractor failure to carry out these

sanctions and penalties shall be a violation of this clause and Executive Order 11246, as amended.

40.13 The Subcontractor, in fulfilling its obligations under this clause, shall implement specific affirmative action procedures, at least as extensive as those standards prescribed in paragraph 40.7, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Subcontractor fails to comply with the requirements of Executive Order 11246, as amended, the implementing regulations, or this clause, the Director shall take action as prescribed in 41 CFR 60-4.8.

40.14 The Subcontractor shall designate a responsible official to (i) monitor all employment related activity to ensure that the Subcontractor equal employment policy is being carried out, (ii) submit reports as may be required by the Government or Fermilab, and (iii) keep records that shall at least include for each employee the name, address, telephone number, construction trade, union affiliation (if any), employee identification number, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, separate records are not required to be maintained.

40.15 Nothing herein shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

40.16 The goals and timetables for minority and female participation expressed in percentage terms for the Subcontractor's aggregate workforce in each trade on all construction work in the covered area, are as follows:

Timetables	Goals For Minority Participation In Each Trade	Goals For Female Participation In Each Trade
All Trades & Crafts	19.6%	6.9%

These goals are applicable to all Subcontractor's construction work performed in the covered area. If the Subcontractor performs construction work in a geographical area located outside of the covered area, the Subcontractor shall apply the goals established for such geographical area where the work is actually performed. Goals are published periodically in the Federal Register in notice form, and these notices may be obtained from any Office of Federal Contract Compliance Programs office.

The Subcontractor's compliance with Executive Order 11246, as amended, and the regulations in 41 CFR 60-4 shall be based on (a) its implementation of the Equal Opportunity Clause, (b) specific affirmative action obligations required by this clause, and (c) its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the subcontract, and in each trade. The Subcontractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Subcontractor to Subcontractor or from project to project for the sole purpose of meeting the Subcontractor's goals shall be a violation of the subcontract, Executive Order 11246, as amended, and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

40.17 The Subcontractor shall provide written notification to the Director, Office of Federal Contract Compliance Programs within 10 working days of award of any construction sub-subcon-

tract in excess of \$10,000 at any tier for construction work hereunder. The notification shall list (a) name, address and telephone number, and employer identification number of the sub-subcontractor; (b) estimated dollar amount of the sub-subcontract; (c) estimated starting and completion dates of the sub-subcontract; and (d) the geographical area in which the sub-subcontract is to be performed.

40.18 As used in this subcontract, the “covered area” is Kane and DuPage, Illinois counties.

41 HAZARDOUS WASTE DISPOSAL

41.1 The Subcontractor shall comply with all applicable federal, state and local laws and regulations governing the transport, storage, treatment and disposal of regulated waste materials included in, or generated during the performance of this subcontract. These statutes include, but are not limited to, the Resource Conservation and Recovery Act, the Toxic Substances Control Act, Hazardous Materials Transportation Act, the Illinois Environmental Protection Act/Solid and Special Waste Management Regulations, and the laws and regulations of any other state receiving the subject waste material.

42. WHISTLEBLOWER PROTECTION FOR SUBCONTRACTOR EMPLOYEES

42.1 The Subcontractor shall comply with the requirements of the “DOE Contractor Employee Protection Program” at 10 CFR Part 708 for work performed under this subcontract that involves or is directly related to activities on the Fermilab site or any other DOE-owned -leased site.

42.2 The Subcontractor shall insert or have inserted the substance of this clause, including this paragraph 42.2, in sub-subcontracts at all tiers for work to be performed under this subcontract that involves or is directly related to activities on the Fermilab site or any other DOE-owned or -leased site.

43. LIMITATIONS ON SUBCONTRACTING

43.1 By submission of an offer and execution of a subcontract, the Offeror/Subcontractor agrees that in the performance of the subcontract:

- (a) in the case of general construction, the Subcontractor will perform at least 15 percent of the cost of the subcontract, not including the cost of materials, with its own employees;
- (b) in the case of construction by special trade contractors, the Subcontractor will perform at least 25 percent of the cost of the subcontract, not including the cost of materials, with its own employees; and
- (c) the Subcontractor will comply with any other limitations on subcontracting set forth elsewhere in the subcontract (e.g., in the Scope of Work or in an Attachment, Appendix, or Exhibit to the subcontract).

43.2 In the event that a different percentage for the situation described in 43.1(a) and/or (b) is set forth elsewhere in the subcontract, that different percentage shall apply.